

**DURHAM CONSERVATION COMMISSION MEETING
MONDAY, JULY 27, 2020 – 7:00 PM
DURHAM TOWN HALL - COUNCIL CHAMBERS - DURHAM, NH**

Note: Due to the Coronavirus pandemic, most members and presenters attended via Zoom video conferencing while a limited number were in Council Chambers.

Members Present: Chair Bart McDonough, Coleen Fuerst, Jake Kritzer; John Nachilly; Sally Needell; and Walter Rous; Alternates Liz Durfee, Mary Ann Krebs and Roanne Robbins.

Also Present: Michael Behrendt, Town Planner and Lucie Bryar, Minute Taker

I & II. Call to Order and Roll Call.

Chair Bart McDonough called the meeting to order at 7:00 p.m. and asked for roll call. He temporarily seated Liz Durfee and Mary Ann Krebs as voting members since Mr. Kritzer and Mr. Nachilly had not yet arrived.

III. Approval of Agenda. Ms. Needell MOVED to approve the agenda as presented, SECONDED by Mr. Rous, APPROVED unanimously, 6-0, Motion carries. *Note: Mr. Kritzer arrived to the meeting immediately after the vote.*

IV. Public Comments: Chair McDonough invited public comments and there were none.

V. 266 Newmarket Road Conditional Use. Conditional use for expansion for driveway and burying electric line within the Wetland Conservation Overlay District. Matthew and Colleen Lake, property owners. Map 18, Lot 4-2. Rural District

Mr. Lake came to the podium and said he and his wife have received approval to construct an attached two-car garage. The homeowners are now seeking to expand the existing driveway slightly and also wish to re-locate a low-hanging utility line underground. A portion of the proposed driveway would be within a 100-foot wetlands buffer, apparently created when the State installed a drainage easement from Route 108 some years ago. [Mr. Lake shared a number of schematics of the proposed work.]

During brief discussion, Ms. Needell and Mr. Rous encouraged the homeowner to consider using less pavement. Ms. Needell suggested using a pervious surface where possible, to allow rainwater from the roof to drain into the ground, for example. Mr. Rous noted that “less pavement is better,” but did not think it necessary to make it a condition of the permit.

Commissioners then reviewed the proposal to determine if it meets the four criteria for conditional use in a Wetlands Conservation Overlay District. The applicant, Mr. Lake, had submitted written responses affirming that all conditions will be met:

1. There is no alternative location on the parcel that is outside of the WCOD that is reasonably practical for the proposed use.

2. *The amount of soil disturbance will be the minimum necessary for the construction and operation of the facilities as determined by the Planning Board.*
- 3.) *The location, design, construction and maintenance of the facilities will minimize any detrimental impact on the wetland and mitigation activities will be undertaken to counterbalance any adverse impacts.*
- 4.) *Restoration activities will leave the site, as nearly as possible, in its existing condition and grade at the time of application for the Conditional Use Permit.*

In reference to item 2, Ms. Fuerst asked the applicant to quantify the amount of soil disturbance that would take place in his application to the Planning Board.

Ms. Needell MOVED to recommend to the Planning Board that the Lake driveway expansion and utility project be approved since the Commission finds that it has met all four criteria for a conditional use permit in a WCOD, subject to the applicant quantifying the soil disturbance to take place, SECONDED by Mr. Rous, APPROVED unanimously, 7-0, Motion carries.

[Alternates Mary Ann Krebs and Roanne Robbins voted; Mr. Nachilly was not yet present.]

VI. Groundwater Modeling Presentation. Presentation about study on the impacts of groundwater levels and water quality in Durham from projected sea level rise. Jayne Knott, JFK Environmental Services.

Ms. Knott was invited to come before the Conservation Commission to describe the Groundwater Modeling Project, which kicked off in June 2020. Tonight's presentation serves as an introduction to the study, i.e., "Sea Level Rise Impacts on Groundwater Levels and Water Quality: A Vulnerability & Planning Study in Durham, NH."

- The scope of the work involves data collection and construction of a model to show various scenarios that might occur due to rising sea levels. The purpose is to identify vulnerable areas in Durham and to produce a user-friendly technical report that will offer strategies and recommendations for management and mitigation.
- Strafford Regional Planning Commission is overseeing the project. JFK (Ms. Knott's company) will work in conjunction with a UNH scientist to create the models. The town of Durham has named a Technical Advisory Committee to work with the team and the State's Climate Adaptation Group and Department of Environmental Services are also involved.
- \$75,000 funding is being provided by the State of NH Water Pollution Control Revolving Loan Fund, with 100% principal forgiveness.

Ms. Knott then presented some information about the potential impact of rising groundwater on infrastructure and natural resources, including:

- The potential for it to degrade pavement;
- Its potential impact on septic systems
- The potential for saltwater intrusion into drinking wells

- The potential for rising groundwater to expand wetlands, thereby affecting wetlands buffer zones.

Ms. Knott briefly discussed two previous NH studies including a broader coastal study east of Great Bay, that included Portsmouth and Hampton, as well as a 2017 Newmarket study that is very similar to the one now underway in Durham.

She said maps showing rising groundwater projections produced from those studies are now available to developers and government agencies to inform their decisions and the projections have also been added to Risks and Hazards documents.

Commissioners asked a number of questions about the impact on private wells, data collection and availability, the type of modeling techniques to be used and the applicability of the study data.

She said the team will use powerful U.S. government hydrologic modeling software capable of producing three-dimensional models. In answer to a question, she said the NH Dept. of Environmental Services has a well water database created from “well and boring logs” submitted by drilling companies.

Chair McDonough thanked Ms. Knott for the informative presentation and said the Commission will look forward to future updates as the Groundwater Modeling Project progresses.

VII. Climate Adaptation Master Plan. Discussion about purpose and process for upcoming Durham Climate Adaptation Master Plan.

Town Planner Michael Behrendt said the goal of the project is to create a chapter on Climate Adaptation for inclusion in the town’s Master Plan. The hope is to offer innovative solutions and implementable actions to reduce public and private risk as a result of climate change. This work will integrate and be informed by existing chapters on Agriculture, Energy and Natural Resources already in the Master Plan.

Kyle Pimental, lead planner from Strafford Regional Planning Commission, will work with a town leadership team headed by Town Administrator Todd Selig to draft the chapter over the next seven months. During the process, relevant town boards and commissions will have the opportunity to give input. The projected cost is \$26K with \$17K paid by a federal grant. The town will contribute \$3,500 in cash plus in-kind staff and board member hours.

Mr. Behrendt mentioned topics that might be included in the climate change chapter, using the city of Dover’s work as an example. These include how climate change might affect water availability and quality; potential flooding and droughts; public and private drinking water supplies; its effect on private septic systems; a potential for increased infectious diseases; its impact on agriculture and aquaculture, energy costs, roads, bridges, utilities and wastewater facilities, among other topics.

Commissioners said they believed the project to be worthwhile and a complement to the earlier study on rising groundwater. Mr. Kritzer questioned if the timeline and budget are realistic for the scope of the work. Mr. Behrendt said he believes the finished chapter won't go into a lot of detail but rather will provide a useful road map for the town going forward.

VIII. Review Process for Wetland Applications. Discussion about review process and information that is needed to review applications under the Wetland Conservation Overlay District and Shoreland Protection Overlay District, conservation subdivision applications, and other projects affecting wetlands.

Chair McDonough said tonight's discussion is to address issues raised at the last meeting regarding the type of information applicants should provide when applying for wetlands permits and also the issues commissioners should consider when reviewing applications.

Ms. Needell had distributed a proposed list to Commissioners prior to the meeting and said she drafted the guidelines primarily from information in Durham's Master Plan and using guidelines from the NH Departmental of Environmental Services.

Mr. Rous said the guidelines are great, but he thinks the Commission needs to distinguish between minor projects and larger projects so the process doesn't become burdensome for applicants with minor projects.

Mr. Kritzer commented that sometimes small projects can have a larger environmental impact than initially thought. He believes the proposed guidelines will help the Commission determine which conservation issues to consider with each application.

Discussion followed about how the guidelines should be used. Some thought they should be added to the permit application; others believed they should simply be shared with applicants as a point of information – to let them know what types of questions the Commission might ask. Chair McDonough said the guidelines could become part of the four criteria currently used to review wetlands applications.

Mr. Behrendt, who manages the application process, said adding the information to the application could be cumbersome and confusing for applicants, particularly for those with smaller projects. He urged the Commission to be very clear with applicants about what they need to submit.

Commissioners briefly discussed the review process in cases that are also subject to review by the Department of Environmental Services. Mr. Behrendt said applications only go to DES if the work is proposed in a wetlands, not in a buffer. He estimates this only occurs in about a quarter of cases. Applicants generally need to come before the town prior to applying to DES for any permits.

Mr. Kritzer said he does not believe the guidelines would be burdensome to applicants since they would not necessarily be required to submit more documentation or studies. He views the

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guidelines as a “heads up” about questions that might be asked and also believes using them would result in better, more consistent decisions by the Commission.

Finally, it was agreed that Ms. Needell will work with members’ input to re-phrase the guidelines into a question format so they are less likely to be interpreted as strict requirements. Once revised, the guidelines will be discussed at a future meeting.

IX. Other Business

Mr. Rous shared that timber mats in use for the Seacoast Reliability Project have finally been removed.

Ms. Needell and Mr. Nachilly gave a brief update on Land Stewardship activities. Ms. Needell said the Committee is recommending to Town Council that horses be prohibited on town trails. Mr. Nachilly said he worked with UNH interns who did a great job at Merrick Forest but the Committee is still seeking individual volunteers to do work on trails and lands.

X. Review of Minutes: November 25, 2019; April 27, 2020; May 8, 2020; and June 22, 2020.

Ms. Needell MOVED to approve all minutes as submitted (personally abstaining from the November 2019 minutes), SECONDED by Mr. Rous, APPROVED unanimously, 6-0, Motion carries.

XI. With no further business, Mr. Rous MOVED to adjourn the meeting at 9:12 p.m., SECONDED by Mr. Kritzer, APPROVED unanimously, 6-0, Motion carries.

Respectfully submitted,
Lucie Bryar, Minute Taker
Durham Conservation Commission

Note: These written minutes are intended only as a general summary of the meeting. For more complete information, please refer to the DCAT22 On Demand videotape of the entire proceedings on the town of Durham website.